

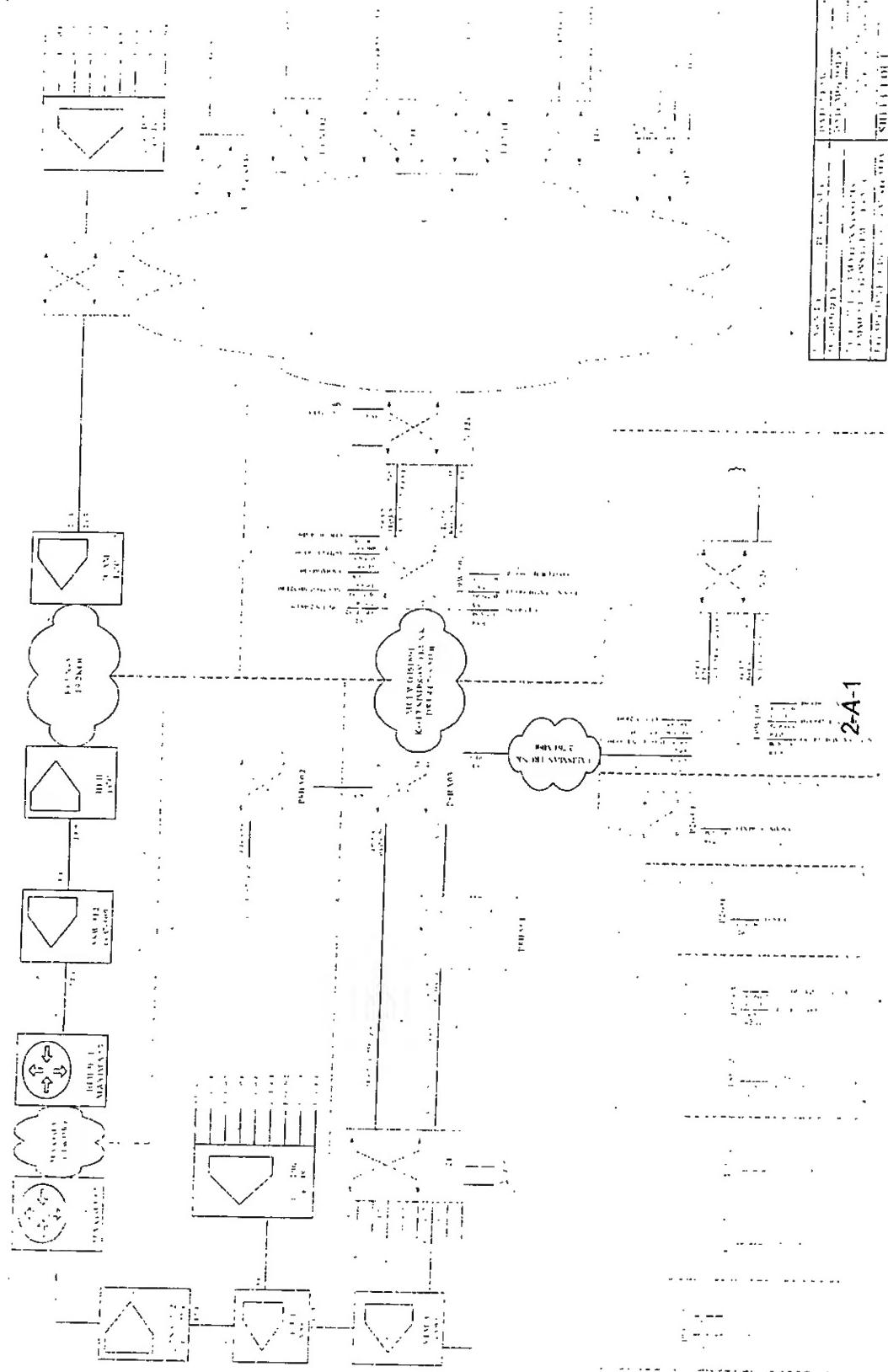
APPENDIX 1 TO
ANNEX A TO
US/AS MOU CONCERNING
DEFENSE COMMUNICATIONS SERVICES

SIMPSON PROJECT APPROVED SYSTEM DIAGRAM

1. Situation. The SIMPSON System consists of data terminal equipment routed via leased commercial facilities between Wahiawa, HI, and Canberra, AS, and between Canberra, AS, and Wellington, NZ.
2. Mission. The purpose of the system diagram is to provide accurate configuration details. The diagram and TSOs will provide the channelization of the equipment, channel/circuit termination, pass through circuits and multi-point circuits in each respective country.
3. Administration. The diagram applies to affected DCS activities (United States, Australia, and New Zealand) associated with the SIMPSON. All stations should ensure that the diagram is readily available to all supporting technical control facilities.
4. Date of Effect. This diagram is effective upon receipt. Recommendations for changes will be passed by DISA-PAC to DNO DNSA for incorporation into the diagram.
5. Record of Changes. Changes and revisions to the diagram will be issued by DNO with identifying consecutive revision numbers, date of revision, and approval agent's signature/approval.
6. Remaining In Effect. This diagram to the basic MOU, with changes and revisions, is valid only as long as the basic MOU remains in effect.

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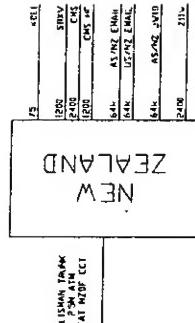
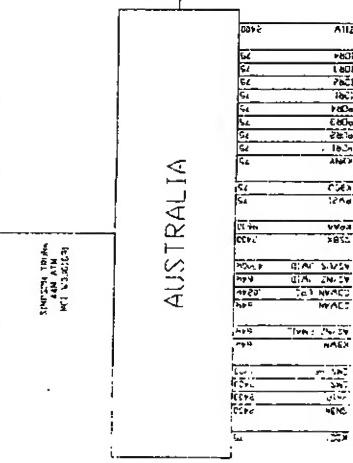
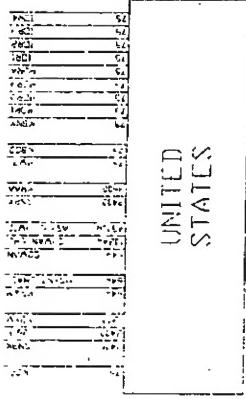
SIMPSON Trunk Diagram



APPENDIX 2 TO
ANNEX A TO
US/AS MOU CONCERNING
DEFENSE COMMUNICATIONS SERVICES

LEASED LINES IN THE SIMPSON PROJECT

1. The Simpson Project includes two major international leased lines. These are:
 - a. The Simpson trunk from Wahiawa to Canberra; and
 - b. The Talisman trunk from Canberra to Wellington.
2. The following diagram shows how these leased lines relate to the supported circuits.



Simpson System Overview

DS3 trunk Wahiawa to Harman

3.0Mbps VPC Wellington to Harman

3. MCI Line Number W0J61691

4. NZDF ATM Circuit

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Technical Contacts

5. AS NOC (Australia) +61 2 6127 8333
 - (a) MCI Fault Reporting (AS) 1300 368 811
 - (b) Customer Services Asia Pacific +65 6248 6770
6. GNSC (United States) +1 808 656 2777
7. NZ NOC (New Zealand) +64 4 496 0220

Funding and Maintenance

8. Funding is as per SECTION IV US/AS MOU Concerning Defense Communications Services. Funding arrangements and maintenance responsibilities for specific items are described in the table below.

| Part Description | Configuration Maintenance and Modifications | Hardware Maintenance and Modifications | Funding (lines, spares, maintenance and upgrades) |
|---|---|--|---|
| Leased Line WQJ61691 | AS DNSA | AS DNSA | 50% AS DNSA 50% US DISA |
| Leased Line (NZDF) | NZ | NZ | NZ |
| Nortel Passport PW1E1 | AS DNSA | NZ | AS DNSA |
| Nortel Passport P8DE1 | AS DNSA | AS DNSA | AS DNSA |
| Promina Node NZ | US DISA | NZ | US DISA |
| Nortel Passport P9WA1 | AS DNSA | US DISA | AS DNSA |
| Nortel Passport P8HA1 | AS DNSA | AS DNSA | AS DNSA |
| Promina Node 21 | US DISA | AS DNSA | US DISA |
| Equipment at NZ excluding Nortel Passport PgWE1 and Promina Node NZ | NZ | NZ | NZ |
| Equipment at Wahiawa excluding Nortel Passport PgWA1 | US DISA | US DISA | US DISA |
| Equipment at HMAS Harman excluding Promina Node 21 | AS DNSA | AS DNSA | AS DNSA |
| Promina - US | US DISA | US DISA | US DISA |
| DSDN - AS | AS DNSA | AS DNSA | AS DNSA |
| Cryptographic Key | US DISA | US DISA | US DISA |

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APPENDIX 3 TO
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DEFENSE COMMUNICATIONS SERVICES
SIGNED _____ DATE _____

SIMPSON PROJECT SERVICES

1. The following table details the services carried and responsibilities for those services carried via the SIMPSON trunk and TAUSMAN trunk as part of the MOU.

| Ser | Service Short Name | Data Rate (bps) | Description | Specific Responsibilities | | Technical POC | Funding | Remarks |
|-----|--------------------|-----------------|--|--------------------------------|---------------------------|-----------------------------|---------|---------|
| | | | | AS | US | | | |
| 1 | KWBM | 64K | US/AS secure e-mail service up to SECRET | AS - Passport at WAHAWA US | AS NOC +61 2 6127 8333 | GNSC +1 808 656 2777 | Shared | |
| 2 | CENTRIX IV | 1M | Combined information environment between AS/US/UK and CA | AS - Passport at WAHAWA US | AS NOC +61 2 6127 8333 | GNSC +1 808 656 2777 | Shared | |
| 3 | CFBL Net | 10M | Combined interoperability environment for C4ISR | AS - Passport at WAHAWA US | AS NOC +61 2 6127 8333 | GNSC +1 808 656 2777 | Shared | |
| 4 | SNBK | 2.4K | Formal messaging AS/US | AS - Passport at WAHAWA US | AS DISCON +61 2 6127 8333 | US DMS +1 808 656 2777 | Shared | |
| 5 | KDE1 | 75 | SIMPSON System Order wire | AS - Passport at WAHAWA US | AS SYSCON +61 2 6266 6815 | NZ Carl Fisk +64 4 496 0220 | Shared | |
| 6 | Z11W | 2.4K | HF rerad circuit to all NZ to | AS - Passport at Wellington NZ | AS DISCON +61 2 6266 6696 | NZ Carl Fisk +64 4 496 0220 | Shared | |

| Ser | Service Short Name | Data Rate (bps) | Description | Specific Responsibilities | AS | Technical POC | Funding | Remarks |
|-----|--------------------|-----------------|---|---|--|-----------------------------------|---------|---------|
| | | | | | US | NZ | | |
| 7 | SDXV | 1.2K | operate a HF transmitter in AS | Wellington NZ | +61 2 6266 6815 | +64 4 496 0220 | | |
| 8 | CMS | 2.4K | Formal messaging US/NZ | AS - Passport at WAHIAWA US AS - Passport at Wellington NZ US - PROMINA IDNX Harman AS | US DMS +1 301 619 7497 GNSC +1 808 656 2777 | NZ Carl Fisk +64 4 496 0220 | Shared | |
| 9 | KRAA | 9.6K | Formal messaging AS/NZ | AS - Passport at Wellington NZ | AS DISCON +61 2 4737 7452 | NZ Carl Fisk +64 4 496 0220 | Shared | |
| 10 | PW21 | 75 | USAF weather circuit | AS - Passport at WAHIAWA US | AS SYSCON +61 2 6266 6696 | GNSC +1 808 656 2777 | US | |
| 11 | KBCQ | 75 | Satellite order wire | AS - Passport at WAHIAWA US | AS SYSCON +61 2 6266 6696 | GNSC +1 808 656 2777 | Shared | |
| 12 | KBNY | 75 | Satellite order wire UHF | AS - Passport at WAHIAWA US | AS SYSCON +61 2 6266 6696 | GNSC +1 808 656 2777 | Shared | |
| 13 | POR 1-4 | 4 x 75 | FLTSATCOM circuits on Pacific Ocean | AS - Passport at WAHIAWA US | AS SYSCON +61 2 6266 6696 | GNSC +1 808 656 2777 | Shared | |
| 14 | IOR 1-4 | 4 x 75 | US UHF FLTSATCOM circuits on Indian Ocean | AS - Passport at WAHIAWA US | AS SYSCON +61 2 6266 669 | GNSC +1 808 656 2777 | Shared | |
| 15 | 26P1 | 2.4K | Alternate formal messaging | | AS DISCON | US DMS | Shared | |

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| Ser | Service Short Name | Data Rate (bps) | Description | Specific Responsibilities | Technical POC | | | Funding | Remarks |
|-----|--------------------|-----------------|--|-----------------------------|--------------------|--------------------|----|---------|---------|
| | | | | | AS | US | NZ | | |
| 16 | GRIFFIN | 2M | Combined information environment at SECRET for AUSCANUK/USNZ | AS – Passport at WAHIAWA US | +61 2 6266 6815 | +1 301 619 7497 | | | |

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APPENDIX 4 TO
ANNEX A TO
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DEFENSE COMMUNICATIONS SERVICES

RESPONSIBILITIES, MANAGEMENT, MAINTENANCE, AND FUNDING OF
THE NORTEL PASSPORTS

1. Purpose. This appendix specifies responsibilities for the management, maintenance, and funding of the Nortel Passports.
2. System Description. The NORTEL Passport terminates the international ATM trunk at either end of the international trunk. The NORTEL Passport provides individual circuits and data channels (described as Tails) for the services covered by this MOU. The approved system diagram details the circuit and channel paths of the individual services.
3. Responsibilities. The Specific responsibilities for the Nortel Passports are as follows:
 - a. The United States is responsible for:
 - (1) Performing maintenance (under the direction of DNSA network operations staff) on the passport equipment located at Wahiawa, HI, when it is not possible for AS DNSA network operations staff to remotely manage or maintain the equipment as a result of equipment or trunk failure.
 - (2) Connecting the circuit tails at Wahiawa, HI.
 - (3) Providing the TCF for all DCS circuits that pass through the facility.
 - b. Australia is responsible for:
 - (1) Remote management of Nortel Passports.
 - (2) Installing, operating, and maintaining all Nortel Passports at Canberra, AS.
 - (3) Connecting the circuit tails at Harman, AS.
 - (4) Providing the CCO.

4. Technical Control and Coordination:

a. Specific responsibilities of the CCO:

- (1) Maintain cognizance of the operational status of the Passports.
- (2) Whenever possible, direct timely remedial action with the commercial carriers to correct degraded system performance, advising DNSA network operations and/or DISA-PAC.
- (3) Keep TCF advised of conditions that may affect the operation of the transmission facilities.
- (4) Forward performance data from TCF, as appropriate.
- (5) Request for system circuit configuration changes to DISA-PAC.

b. Specific responsibilities of the TCFs:

- (1) Prepare and coordinate with users and commercial agency schedules for activation, deactivation, restoral, testing, and reporting to the CCO of circuits for which control responsibility has been assigned.
- (2) Advise the CCO of any conditions that might affect service. Such conditions would include failure to meet circuit order or TSO specifications, non-availability of leased circuits segments, etc.
- (3) Record, file and forward to the CCO, as required, test data resulting from scheduled and unscheduled in-service and out-of-service quality control tests.
- (4) Keep the CCO, users and other TCFs informed of the progress of restoration work or of any conditions that may affect serviceability.

5. Circuit Allocation and Change Procedures

a. This section sets forth the technical procedures relating to the assignment and bandwidth allocation of the passport trunks and data services. The applicable trunks are:

- (1) Wahiawa-Canberra trunk.
- (2) Canberra-Wellington trunk.

- b. All requests to allocate bandwidth or change the configuration of passports in the Simpson project will go through the DNSA change control process. Change control requests will be generated by DNSA.
- c. Use of spare bandwidth on the ATM trunk will be made available to either Participant in the event of an emergency situation. Use of spare bandwidth or pre-emption of lower priority circuits can be accomplished under CCO direction without DNSA and DISA coordination, however, after-the-fact notification is required.

6. Records:

- a. The DNSA Design and Engineering Technical Support Facility will maintain the following records relevant to Nortel Passport configuration:
 - (1) Circuit Layout Record. Circuit layout records will show:
 - (a) End-to-end configuration.
 - (b) Leased bearer line numbers,
 - (c) User contact number.
 - (d) User equipment.

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APPENDIX 5 TO
ANNEX A TO
US/AS MOU CONCERNING
DEFENSE COMMUNICATIONS SERVICES

RESPONSIBILITIES, MANAGEMENT, MAINTENANCE, AND FUNDING OF
THE SIMPSON SYSTEM EQUIPMENT

1. Purpose. This appendix specifies responsibilities for the management, maintenance, and funding of the Simpson System equipment.
2. System Description. The NORTEL Passport terminates the international ATM trunk at either end of the international trunk. The NORTEL Passport provides individual circuits and data channels (described as Tails) for the services covered by this MOU. The approved system diagram details the circuit and channel paths of the individual services.
3. Responsibilities. The Specific responsibilities for the Nortel Passports are as follows:
 - a. The United States is responsible for:
 - (1) Performing maintenance (under the direction of DNSA network operations staff) on the passport equipment located at Wahiawa, HI, when it not possible for AS DNSA network operations staff to remotely manage or maintain the equipment as a result of equipment or trunk failure.
 - (2) Connecting the circuit tails at Wahiawa, HI.
 - (3) Providing the TCF for all DCS circuits that pass through the facility.
 - (4) HQ DISA, the TCO, will generate all SIMPSON TSRs. DISA-PAC will issue TSOs.
 - (5) DISA-PAC is the custodian of the Restoral Plan (RPLAN) RP1000.
 - b. Australia is responsible for:
 - (1) Installing, operating, and maintaining all Simpson System equipment at Canberra, AS.

- (2) In the context of the cost sharing arrangements of this MOU, paying for the lease services, in accordance with Annex F.
- (3) Connecting the transfer circuits at the DISCON interface stations identified in Annex B.
- (4) Installing, maintaining and operating the AS end of the AS/US DMS circuits.
- (5) Providing the CCO.
- (6) Custodian of the SIMPSON System diagram.

4. Technical Control and Coordination:

a. Specific responsibilities of the CCO:

- (1) Maintain cognizance of the operational status of the Simpson System.
- (2) Whenever possible, direct timely remedial action with the commercial carriers to correct degraded system performance, advising DNSA or DISA-PAC.
- (3) Keep TCF advised of conditions that may affect the operation of the transmission facilities.
- (4) Schedule, monitor, and supervise, as required, periodic technical performance testing.
- (5) Forward performance data from TCF, as appropriate.
- (6) Request for system circuit configuration changes to DISA-PAC.

b. Specific responsibilities of the TCFs:

- (1) Prepare and coordinate with users and commercial agencies schedules for activation, deactivation, restoration, testing and reporting to the CCO of circuits for which control responsibility has been assigned.
- (2) Advise the CCO of any conditions that might affect service. Such conditions would include failure to meet circuit order or TSO specifications, non-availability of leased circuits segments, etc.

- (3) Record, file, and forward to the CCO, as required, test data resulting from scheduled and unscheduled in-service and out-of-service quality control tests.
- (4) Keep the CCO, users and other TCFs informed of the progress of restoration work or of any conditions that may affect serviceability.

5. Quality Control and Testing:

- a. Quality Control. Quality control tests will be conducted on all circuits and trunks of the Simpson System in accordance with DISAC 310-70-1, and:
 - (1) A record of these tests will be maintained in the station.
 - (2) The CCO will coordinate the action with the other TCFs 21 days prior to the scheduled test date.
 - (3) The serving TCFs will coordinate with all users on the system, notifying them of the scheduled tests and whether their circuits will be restored in accordance with the RPLAN in Annex E.
- b. Test Equipment. To properly accomplish the quality control tests prescribed, compatible analog and digital test equipment is required.
- c. Tests. Tests will be conducted in accordance with the test procedures in DISAC 310-70-1, Supplement 1. The performance standards in DISAC 300-175-9 will be used to assess the quality of Simpson System circuits. Quality control reports will be provided by CCO to COMD DNSA.

6. Circuit Allocation and Change Procedures

- a. This section sets forth the technical procedures relating to the assignment and utilization of the Simpson System. The applicable trunks are:
 - (1) Wahiawa-Canberra trunk.
 - (2) Canberra-Wellington trunk.
- b. All channels of the Simpson System are under joint control. Channels not allocated are spare and may be used, subject to the mutual determination of the Participants, for any purpose allowed by this MOU. Circuit assignments on all levels of multiplex trunks will be accomplished by TSOs issued in accordance with DISAC 310-130-1, "Submission of Telecommunications Service

Requests". DNSA will submit a narrative message requesting changes to DISA-PAC, with an information copy to New Zealand. Feeder TSRs will be generated by DISA-PAC. TSRs will be generated by DISA. TSOs will be issued by DISA-PAC. TSR and TSO action in support of the AS-NZ link will be in accordance with separate telecommunications actions by the involved Parties. The TSO is the authority for establishing circuit requirements and system channel allocations. Changes to existing circuits, deactivations or new circuit requirements will be accomplished by TSO action. The use of spare channels for temporary circuit restoration is authorized and channel assignments will be accomplished by the TCF. Use of spare channels for temporary circuit restoration will not exceed thirty days duration with submission by the CCO of a request for temporary circuit extension in the event of an emergency situation. Use of spare channels or pre-emption of lower priority circuits can be accomplished under CCO direction without DNSA and DISA coordination, however, after-the-fact notification is required.

7. Records:

- a. The CCO and all TCFs will maintain the following records on the Simpson System trunks and circuits:

- (1) Circuit Layout Record. Circuit layout records will show:

- (a) End-to-end configuration.
 - (b) CCO/TCF assignments.
 - (c) User contact number.
 - (d) In-station patch panel appearances.
 - (e) Data rate.
 - (f) User equipment.
 - (g) Restoration route, if any.

- (2) Station Logs. Station logs will be maintained at all stations. All station logs will use GMT. The following items will be entered on the station log:

- (a) Station. Name of station.
 - (b) Date. Current month, day, and year.
 - (c) Time Period. Time covered by the log.